# Nebraska Information Technology Commission Community Technology Fund 2000

## **Application Form**

### Section I: General Information (Required)

**A. Project Title:** From Plowshares to PCs: Creating a Learning Community in South-Central Nebraska

Name of Submitting Entity: Central Community College – Holdrege Center & University of Nebraska Cooperative Extension – Phelps/Gosper County

### **Project Contact Information:**

Name: Diana Watson

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E-mail Address: dwatson@cccneb.edu

### **B.** Certification for Request

I certify that to the best of my knowledge the information in this application is correct and that the application has been authorized by this entity to meet the obligations set forth in this application.

Authorized Signature:
Typed Name: <u>Diana Watson</u>
Title: <u>Extended Learning Services Staff Assistant/Coordinator</u>
Name of Entity: <u>Central Community College – Holdrege Center</u>
Date: February 15, 2001
Total State Funds Requested: \$_25,000.00_

Contact information regarding this form:

### **Section II: Executive Summary**

This initiative will permit the Central Community College –Holdrege Center (CCC-HC) and the University of Nebraska (UNL) Cooperative Extension – Phelps/Gosper Counties to make available in rural communities a wide variety of information technology training programs that meet the needs of hospitals, agriculture, public safety, as well as manufacturers. To accomplish this task, the co-partners request funding to provide an instructor and nine laptop computers, fully equipped with current software applications, with the mobile capability to deliver informational technology training within Phelps, Gosper, Furnas, Harlan, Franklin, and Kearney Counties of south central Nebraska. Through academic planning, the partners will increase income efficiency, reduce cost, and unnecessary duplication by expanding collaborative instructional program offerings through the appropriate utilization of technology.

Over a five—year period the co-partners have been involved in numerous chamber of commerce meetings, and a variety of community task force work sessions, all of which have identified the need for access to quality information technology training that would begin to develop a skilled workforce within the region. The *Plowshares to PCs* partners recognize that to sustain their rural communities and remain economically viable they will need to raise the level of individual information technology skills to a competency commensurate with the leading technology of the 21<sup>st</sup> Century. Over a one-year period the partners envision developing the information technology skills of 75-125 individuals within the region. These individuals would create a new labor pool, upgrade the current workforce and support information based economic development. In addition individuals in transition (e.g. those seeking off farm income, single parents, senior citizens) would have newly acquired skills thus allowing them to compete in surrounding job markets.

#### Section III: Goals and Objectives

#### **GOAL**

The goal of this project is to stimulate and support information based economic development through the creation and delivery of accessible information technology training to residents of rural communities in six south central Nebraska counties, through the use of a mobile training lab.

By meeting this goal, CCC-HC and UNL Cooperative Extension – Gosper/Phelps Counties, fulfills <u>Goal</u> <u>1</u> of the Nebraska Information Technology Commission - "Broaden educational opportunities to include expanded access to lifelong educational and training opportunities so that Nebraska's workforce and all citizens can prosper in the emerging information society." Providing residents of rural communities with access to education and training of this magnitude truly has the potential to improve the quality of life and significantly impact the economy within the region and throughout the state.

There is a crying need for quality training that is geographically accessible thus minimizing long distance travel. The project staff and their partners are prepared to step into the forefront to work with communities and help meet this need by implementing all aspects of the project within the six county region. CCC-HC and UNL Cooperative Extension – Phelps/Gosper Counties are equipped to deliver quality informational technology training programs in the following areas:

- **Microsoft Office** The most widely used word processing, database, spreadsheet, and presentation tool currently on the market.
- Quicken Record keeping, widely used in the agricultural sector
- **Master Navigator** Created by IANR, this training program helps build local capacity in Nebraska communities through training individuals in the usage of business technology including Internet skills.
- **Electronic Main Street** Created by IANR this program will assist participants in the selection and training of communications technology that will increase business potential.

• **Web Design** – Created by Central Community College this training program shows participants how to design and layout a web site that will facilitate economic development at all promotional levels.

#### **OBJECTIVES**

Objective 1 – Based upon informal community technology assessments project staff will implement an initial training plan, beginning June 2001, that will identify and market strategically located training sites within the proposed geographical region.

*CC – 1* Ensuring access to public and private services for all citizens of the State of Nebraska (regardless of impediment...i.e., location and socio-economic status) through the appropriate and efficient use of information technology.

Objective 2 – CCC-HC and UNL Cooperative Extension educators will use regional marketing media to inform individuals within the six-county region of the accessibility to information technology training.

*CC – 4* Facilitating IT development and innovation by raising awareness, sharing information, encouraging collaboration and developing partnerships among public and between public and private entities.

**NITC Goal 1**-Broaden educational opportunities to include expanded access to lifelong educational and training opportunities so that Nebraska's citizens and workforce can prosper in the emerging information society.

Objective 3 – Increase educational access to information technology training by 35% within a 12-month period, by training an initial group of 75-125 individuals within the six-county region.

*NITC Goal 3* – encourage the appropriate use of information technology in education, healthcare, and economic development, and every level of government service.

Objective 4 –Over a one-year period project staff will enlist the assistance of their partners to complete the <u>Building Information Communities</u> assessment developed by the NITC and Community Council.

NITC Goal 3 – Stimulate and support information-based economic development. CC –4 - Facilitating IT development and innovation by raising awareness, sharing information, encouraging collaboration and developing partnerships among public and between public and private entities.

Central Community College is committed to *enhance student learning through appropriate integration of technology in the delivery of instruction and in learner support services.* UNL Cooperative Extension is involved in the *Technologies Across Nebraska Initiative* to reduce the 'digital divide' between urban and rural counterparts, thus, *Project: Plowshares to PCs* supports the entity's comprehensive technology plans.

#### **Section IV: Scope and Projected Outcomes**

#### 1. Beneficiaries

Beneficiaries of this project are the lifelong learners throughout the six-county region. These citizens will be able to stay within their local community and/or region and receive training and retraining currently unavailable. Project staff envisions that *Plowshares to PCs* will strengthen rural communities by creating a skilled workforce that will stimulate and support information-based economic development.

## 2. Expected Outcomes

Historically, individuals completing advanced education and training have a tendency to stay within the communities in which training was received. Providing residents of rural communities with local access to education and training has the potential to improve the quality of life and significantly impact the economy within the region.

Project partners anticipate that a workforce equipped with basic information technology skills will strengthen the regional economic development recruitment process.

#### 3. Measurement and Assessment Methods to verify project outcomes

Instructional staff will administer a skills survey to all participants at the beginning of the training to measure baseline computer literacy. The skills assessment will be conducted mid-course to allow for any program changes. Upon completion of the training program individuals will again be given a post-assessment to measure the success of the overall training.

Quantitative data will be gathered on the number of individuals enrolled in the information technology training programs. Quantitative and qualitative data will be gathered from students completing programs utilizing the mobile lab, in order to assess the effectiveness of the geographic accessibility.

### 4. Significant Constraints

- Organizing the communities into teams to complete the Community Assessment over a one-year
  period will be a constraint to the success of this project. Although the majority of towns in the
  region are small in size there is a grass roots commitment to expand access to information
  technology training.
- Sufficient funding to implement the proposed technology plan is a constraint.

#### 5. Significant Assumptions relating to the project

For the success of this project the following assumptions are made;

- We will be able to establish 12 training locations over the 12-month project period.
- In the 1997 *Nebraska Annual Sociological Indicators Survey, (NASIS)* 79% of Nebraskans felt it is definitely more important today to have a college degree compared to 10 years ago and yet only 32% have at least a two-year degree. In 1997, NASIS also reported 89% of the Nebraskans felt it was important for college and universities to use technology to deliver education and training.
- The top two barriers of obtaining education and/or training are time and money followed by availability of courses and the convenience of taking courses. This proposal addresses these issues by bringing additional education and training closer to home at convenient times, at an affordable cost.

#### **Section V: Project Justification (Business Case)**

### 1. Cost/Benefit Analysis

The expected life cycle of the mobile computer lab equipment is three years. If project staff divide the requested \$25,000 by 375 (total of 125 trained individuals per year for three years) the estimated cost of training per individual would be \$67.00 per year.

### 2. Impact on Customers, Clients, and Citizens

 This project will serve the training needs of not only first-time students but also individuals seeking new career opportunities or new skills through the effective use of educational technology.

- It is anticipated that the project will significantly impact the citizens of the six-county region personally and economically due to an upgraded workforce, thus resulting in job retention and a stronger economy.
- Business and industry will have access to training that previously was unavailable due to
  geographical constraints. Nebraska's unemployment rate continues to rank among the lowest in
  the nation, therefore, creating an urgent need to enhance employees from within as well as
  developing a skilled workforce, recruited statewide.

### 3. Impact on Current Problems

- As a result of convenient access to information technology training, citizens within rural areas will not have to travel long distances to acquire needed work place skills.
- The collaborative training efforts of CCC-HC and UNL Cooperative Extension will eliminate replication of costly programs.
- Instructional training areas that are experiencing a short supply of qualified trainers would have the capability of sharing resources. As a result of collaborative efforts business and industry needs will be able to be met by the sharing of highly specialized trainers.

#### 4. Other Solutions

- UNL Cooperative Extension has 4 laptop computers available to serve 21 counties and currently there are a total of 15 computers located in libraries throughout the entire six-county region. Chambers of Commerce committees and community technology task force groups have studied various ways that computer-training labs could be implemented and collectively concluded that staffing, equipment purchase, technical assistance and maintenance would be cost prohibitive at the least.
- Project staff in collaboration with business and industry throughout the region have considered establishing a core of training volunteers, but it became very apparent that training and equipment would soon become obsolete.
- Using computer technology for a variety of educational training methodologies is the mode of operation nationwide. To *do nothing* would be to move Nebraska into a backward mode of delivery causing students/employers to turn to other distance-learning providers for convenient and accessible education and training. Consequently, Nebraska would risk the loss of business and industry to other states.

#### 5. Project's compliance with any state or federal mandates

This project has no direct mandates that are applicable.

#### **Section VI: Implementation**

## 1. Project Sponsors and Stakeholders Acceptance Analysis

Central Community College – Holdrege Center and the University of Nebraska Cooperative Extension – Phelps/Gosper Counties are the primary stakeholders of this project. This group believes that education is an investment in human resources and is fundamental to the quality of life and the economic prosperity of the State of Nebraska. Stakeholders outside of CCC-HC and UNL Cooperative Extension include the hospitals, agriculture, public safety, as well as manufacturers within the six-county region who have a great need for qualified employees. Finally, all Nebraskans are stakeholders in this effort because a strong workforce promotes prosperity for individuals and the State of Nebraska.

#### 2. Roles, Responsibilities, and Required Experience of the Project Team

Throughout their existence Central Community College and the University of Nebraska Cooperative Extension have utilized a variety of educational methods as a means of reaching individuals. When the Neb\*Sat system and computer technology were implemented Central Community College – Holdrege Center and UNL Cooperative Extension began linking education and training programs where connections were available.

#### • Project Coordinator: Ms. Diana Watson

Ms. Watson is currently the Extended Learning Services Staff Assistant/Coordinator for the Central Community College –Holdrege Center. The project tasks required of Ms. Watson are currently integrated into her job responsibilities. She will schedule locations, trainers, register participants, evaluate project impact and serve as liaison to Central Community College's Management Information Systems (CCC-MIS) technology maintenance help desk.

### • Project Coordinator: Ms. Leslie Crandall

Ms. Crandall serves as Extension Educator for Phelps/Gosper Counties and in that capacity provides specialized software training (e.g. Electronic Main Street, Master Navigator) to residents throughout those counties. Leslie will provide the on-going leadership in the implementation of this project, coordinating the utilization of the proposed technology and conducting program evaluations of all activities associated with the project.

### • Instructional Training Staff

In anticipation of receiving project funding the project directors will use CCC-HC and UNL Cooperative Extension instructional staff.

These individuals have been involved in providing leadership to existing projects among the community college, UNL Cooperative Extension, K-12 schools and other rural community initiatives. They bring a tremendous amount of talent and expertise to the project.

## 3. Major milestones and deliverables for each milestone

### June

- Complete acquisition of laptop computers and software
- Project staff will meet to identify training locations
- Identify instructors and have orientation meeting

### July

- Project partners will market the training programs in their regions
- Project staff will assess training needs
- Begin registration of participants
- Complete training schedule for requested classes
- Regional community teams will be developed to begin training to implement the <u>Building Information Age</u> community assessment
- Milestone NITC community assessment is underway in the six-county region

#### August

- Milestone First training class begins
- Mobile training lab travels to first training location
- Instructors will conduct pre-skills assessment of information technology skills
- First training session is held

#### September – December

- Pre-skill assessments have been conducted
- Five additional scheduled training programs have been completed
- Milestone Mid-course Evaluation
- Participants will be surveyed to monitor current success of the project
- Mid-course adjustments will be made if necessary
- Evaluation of the implementation of the NITC community assessment survey is underway

## January - April

- Marketing continues
- Six training sessions have been scheduled
- Mobile training lab/instructor has completed six training sessions
- Assessment of completed training project begins
- NITC community assessment survey continues

#### May –

- Milestone Completion of Project: Plowshares
- 12 Information Technology sessions have been completed in the scheduled locations
- Training locations/ sessions are evaluated
- NITC community assessment survey results are compiled
- Using the evaluations from the completed project, a regional information technology task force begins the development of a 5-year area-wide technology training plan

## 4. Training and Staff Development Requirements and Procedures

- The designated information technology trainers will facilitate the training sessions.
- Cooperative Extension trainers are skilled in Master Navigator and Electronic Main Street software applications.
- CCC-HC adjunct faculty have developed curriculum for classes including Introduction To Computers, Introductory and Intermediate Microsoft Office applications in addition to other applicable software training needs.
- Additional training for instructors will include the designated technology and pedagogical methodology appropriate to the delivery mechanism.

#### 5. Maintenance and On-going Support Requirements, Plans, and Provisions

- The Central Community College MIS team will act as consultants in the technical operations providing day-to-day support of the system.
- Designated CCC instructors and Cooperative Extension trainers will provide continuous support to instructional staff as needed.

## **Section VII: Technical Impact**

1. Hardware, Software, and Communications Requirements for this project (See Attachment A) Nine laptop computers, one Proxima projector and current software applications are required to implement this training project. Current technology has a life expectancy of 3-4 years with a dependable parts and labor warranty. The laptops have the capability of being networked. Project staff is working with the CCC-MIS department to ensure that scheduled training locations will have the ability to connect all nine workstations to the Internet, at one time.

#### 2. Rationale of the Selection of Technology Components

The majority of business and industries located in the six-county region are using Microsoft Office products. This system would allow for training in the basics of computer use and progress into the specifics of word processing, developing spreadsheets, database use and presentation software. Computer laptops allow the mobility needed to travel to select training sites throughout the region. In addition the technology components are compatible with existing institution and/or statewide infrastructure. Selection of the additional software applications is based upon training requests.

#### 3. Reliability, Security, and Scalability Issues

- Project directors and instructional staff will have to establish security measures that allow only program participants to login to the Internet and work on program content.
- Project directors and instructional staff will have to set up secure e-mail accounts and passwords.
- CCC-MIS has the capability to provide e-mail and web backup on a regular basis.
- CCC-MIS has security measures in place that provide dependable connectivity.
- CCC-MIS is experienced in scalability issues and will work with the project staff as upgrades and new connectivity issues arise.
- Scheduling software insures only authorized personnel are permitted to schedule an individual location No person can link into an existing program without proper authorization.

## 4. Appropriateness of the Key Technologies

This project involves no telecommunication lines or equipment that relate to the Nebraska Technology Plan.

## 5. Compatibility with Existing Infrastructure

The existing CCC-MIS infrastructure is Windows based, using Microsoft networking. If connecting locations have dial-up communication capabilities connectivity is assured.

#### **Section VIII: Risk Assessment**

#### 1. Risk Factors

CCC-HC and UNL Cooperative Extension like all educational institutions, constantly face limited resources in funding to meet existing program needs as well as add or expand to other instructional program areas. Other risk factors are:

- In an attempt to serve lifelong learners in greater Nebraska, The high cost of technology puts an additional strain on funds, yet has become a necessary component in meeting the educational and training needs of rural communities.
- Tuition dollars many times do not cover the high cost to deliver an instructional program, yet the program is needed in order to help communities provide necessary services to citizens.
- These six-counties have experienced a decline in population, yet there is a critical need for training and retraining of individuals to support current business and industry workforce needs and to serve as an economic development tool in the region.

#### 2. Identified Risks

- Due to unavailable access to education/training, individuals may leave the region or alter their career plans and enroll in other educational and/or training programs.
- Adequate class enrollments will relate to whether the training can be conducted
- Hire qualified adjunct faculty and they resign to take higher paying jobs.

FY 2001-2002

• Will Internet access be available at one time for 9 workstations, who will pay the Internet charges and will the bandwidth be sufficient?

## 3. Strategies to Minimize Risks

- A regional marketing plan will be developed to promote the collaborative training programs to business/industry and community based organizations, as well as high school counselors. It is anticipated that enrollments will increase, as individuals become aware of the accessibility of information technology training.
- This partnership utilizes training resources thus providing stable instructional staff. Current Cooperative Extension Educators will incorporate project training into their plan of work.
- CCC-MIS will work with project staff to address bandwidth and multiple Internet access.
- Project staff will incorporate Internet use charges into the fee structure.

## 4. Impact if Project is not completed

Nebraska residents will not be able to access quality education and training within their regional area. This will naturally put rural communities at a disadvantage in providing quality services and/or attracting new industry. An upgraded workforce will not be readily available, thus, rural communities will continue to struggle with economic development.

	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
	Funding	Match (3)	Match (0)	Sources (7)	
Personnel (1)			\$8,304		\$8,304
Contractual Services		T.		T T	
Design					
Programming and Testing					
Project management, evaluatio	n, and quality assu	ırance			
Other (2)					
Capital Expenditures (3)					
Hardware Acquisition	\$24,100				\$24,100
Software Acquisition			\$150		\$150
Network costs			\$100		\$100
Other					
Other Costs					
Telecommunications					
Supplies and materials			\$500		\$500
Other operating (4)			\$370		\$370
Travel	\$900		\$500		\$1,400
TOTAL	\$25,000		\$9,924		\$34,924
Financial Narrative Notes:					
Do not fill in the gray cells. Uservices and capital expenditur categories (see below) require	es. If you wish to	further itemi			
1. Please include estimated nur totals for salary and fringe benein this table.					
2. Please itemize other contract	ual expenses on s	eparate sheet			

FY 2001-2002

3. Please itemize capital expenditures by categories (hardware, software, network, and other) on a separate sheet.
4. Please itemize other operating expenses on a separate sheet.
5. Please indicate the source of any cash match.
6. Please indicate the source of any in-kind match and how it will be documented.
7. Please provide a breakdown of any other external funding sources. Sources of external funds may include grants from federal agencies or private foundations.

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	D HARDV	VARE						
ACQUIS								
	9 laptop computers (specs a x \$2,400 each			ittached)			\$21,600	
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<u>Leslie</u>								
Crandall	<b>'</b>							
	Project			\$28 x 72 hrs (6			\$2,016	
	Coordina			per month)			2.1.22	
	Electronic Mainstreet Training		\$28 x 20 hrs per course x 3 courses			\$1,680		
D'								
<u>Diana</u> <u>Watson</u>								
	Project			\$19 x 72 hrs (6			\$1,368	
	Coordination			per month)				
<u>Gary</u> Hall								
	Master Navigator Training		\$30 x 20 hrs per course x 3 courses			\$1,800		
Adjuct Faculty for 6			\$20 x 9 hrs per course x 6 \$1,080					
courses, including:				courses			, , , , , , , , , , , ,	
Intro to Computers								
	Joonnpute	13						

	Office							
	2000							
	Quicken							
Other Tra	ainina			\$20 x 18	hrs of req	uested	\$360	
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ITEMIZEI ACQUISI		SOFTW	ARE					
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	Router Hub						\$100	
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						Total	\$9,924	
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						Granu Toldi	φ34,3 <b>∠</b> 4	

## ATTACHMENT A SPECS

- 1. Hardware communications requirements for 9 workstations (\$2,400 each)
  - 833 mhz Pentium III processor

128 mg RAM

8 gig hard drive

Integrated Mouse/Numeric Keypad

Multimedia System, built-in speakers

1.44 MB Floppy Disk Drive

CD-ROM 24X

External Serial, Parallel, VGA and PS/2 Mouse Ports

PCMCIA 1 type III or 2 type II slots

Windows 98 with latest service pack

NT client license

MS Exchange client license

Norton Anti-Virus for Windows 98

AC Adapter

3 yrs parts and labor warranty

Integrated 10/100 Ethernet and V90 56K Modem

Carrying Case

External 2 Button Mouse

Hub

• 1 Proxima projector approximately \$2,500